UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,371	03/17/2004	Ching-Te Tseng	250210-1070	3807

24504 7590 02/11/2008

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP
600 GALLERIA PARKWAY, S.E.
STE 1500
ATLANTA, GA 30339-5994

EXAMINER	
HANCE, ROBERT J	

ART UNIT	PAPER NUMBER
4134	

MAIL DATE	DELIVERY MODE
02/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,371	TSENG ET AL.	
	Examiner	Art Unit	
	ROBERT HANCE	4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/28/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 1a and 1b should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because "transmitting system 300" is not labeled in Figures 3, 5 and 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or

"New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 10 is objected to because of the following informalities: "MPEG" is misspelled in line 3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 5 and 11 are rejected under 35 U.S.C. 102(b) as being unpatentable over Tsuria, US Patent No. 5,786,845.

As to claim 1, Tsuria discloses an image processing method able to maintain the image display quality of a transmitting system during a channel conversion from a first channel to a second channel, wherein a first image signal and a second image signal are respectively transmitted to the transmitting system from the first channel and the second channel, comprising the steps of: (A) sending a channel conversion request to the transmitting system (col. 2 lines 9-11); (B) controlling the transmitting system to stop transmitting the first image signal and start to transmit a preset image signal (col. 2 lines 11-18; col. 4 lines 43-51 – predetermined information is stored and later displayed

during channel changes); and (C) stopping transmission of the preset image signal, and starting transmission of the second image signal (col. 1 lines 44-52; col. 4 lines 43-51).

As to claim 2, Tsuria discloses the image processing method as claimed in claim 1, wherein the step (C) further comprises the steps of: (D) determining whether the transmitting system is ready for the channel conversion from the first channel to the second channel (col. 4 lines 43-51 – predetermined information is displayed until the television is tuned to the second channel); and (E) if the transmitting system is ready for the channel conversion, stopping transmission of the preset image signal, and starting transmission of the second image signal (col. 4 lines 43-51).

As to claim 5, Tsuria discloses the image processing method as claimed in claim 2, wherein the step (D) further comprises the step of: (H) converting the channel from the first channel to the second channel after transmitting the preset image signal for a period of time (col. 4 lines 43-51).

As to claim 11, Tsuria discloses a transmitting system, comprising: a receiving module for receiving a channel conversion request (col. 2 lines 45-52); a tuner for channel conversion from a first channel to a second channel, wherein a first image signal and a second image signal are respectively transmitted to the transmitting system from the first channel and the second channel (Fig. 1 r.n. 19; col. 2 lines 61-67); a controlling device to control the tuner for channel conversion according to the channel

conversion request, stopping transmission of the first image signal and transmitting the preset image signal instead, and starting transmission of the second image signal after stopping transmission of the preset image signal (col. 3 lines 20-26; col. 3 lines 60-65); and a storage device for storing the preset image signal (Fig 1 r.n. 30; col. 3 lines 60-61).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-4, 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria, US Patent No. 5,786,845, in view of Suh, US Patent No. 7,257,261.

As to claims 3, Suh discloses an image processing method consisting of detecting the stability of an image signal by a detector (claim 2).

As to claim 4, Suh discloses comparing the deviation among a plurality of continuous images and determining that the video stream is stable when the deviation is less than a predetermine value (claim 2).

As to claim 12, Suh discloses an image processing method consisting of detecting the stability of an image signal by a detector (claim 2).

As to claim 13, Suh discloses comparing the deviation among a plurality of continuous images and determining that the video stream is stable when the deviation is less than a predetermine value (claim 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the image stability detection scheme disclose by Suh with the system of Tsuria. The rationale for this combination would have been to determine exactly when the television was properly tuned to the second channel in order to minimize the time that predetermined information was displayed. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

7. Claims 6-7, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria, US Patent No. 5,786,845, in view of Masaike, US Patent No. 6,091,459.

As to claim 6, Masaike discloses a background color being displayed when no video signal is supplied (col. 1 lines 4-17).

As to claim 7, Masaike discloses a system capable of displaying text information on a television screen when no video signal is supplied (col. 1 lines 4-17 – OSD controls background color and additional text information to be displayed).

As to claim 15, Masaike discloses a system which displays a background color when no video signal is supplied (col. 1 lines 4-17).

As to claim 16, Masaike discloses a system capable of displaying text information on a television screen when no video signal is supplied (col. 1 lines 4-17 – OSD controls background color and additional text information to be displayed).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Masaike as applied to claims 6-7, 15-16, with that of Tsuria. The rationale for this combination would have been to have a default screen to display during channel changes when no advertisement material was available. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

8. Claims 8-10, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria, US Patent No. 5,786,845 in view of Evoy et al. US Pub. No.: 2003/0053662.

As to claim 8, Evoy et al. discloses the steps of: digitizing the image signal and compressing the digitized first image signal with a predetermined compression method by the transmitting system; and digitizing the second image signal and compressing the

digitized second image signal with a predetermined compression method by the transmitting system (Paragraph 18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the compression system disclosed by Evoy et al. with the teachings of Tsuria. The rationale would have been to use the scheme disclosed by Tsuria in a wireless environment. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to claim 9, Evoy et al. discloses the image processing method as claimed in claim 8, wherein the predetermined compression method involves a "group of pictures" technique (Paragraph 18 – MPEG4 is a group of pictures technique).

As to claim 10, Evoy et al. discloses the image processing method as claimed in claim 8, wherein the predetermined compression method is MPEG4 developed by the MEPG (Moving Picture Experts Group) (Paragraph 18).

As to claim 17, Evoy et al. disclose an analog-digital converter for digitizing an image signal (Fig. 2 see video digitizer 215); and an image encoding device for compressing the digitized image signal by a predetermined compression method (Paragraph 18 – images are stored in MPEG4 format, implying they have been processed by an image encoding device). See similar motivation to claim 8.

As to claim 18, Evoy et al. disclose the transmitting system as claimed in claim 17, wherein the predetermined compression method involves a "group of pictures" technique (Paragraph 18 – MPEG4 is a group of pictures technique).

As to claim 19, Evoy et al. disclose the transmitting system as claimed in claim 17, wherein the predetermined compression method is MPEG4 developed by the MPEG (Moving Picture Experts Group) (Paragraph 18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the compression system disclosed by Evoy et al., as applied to claims 8-10 and 17-19, with the teachings of Tsuria. The rationale would have been to use the scheme disclosed by Tsuria in a wireless environment. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria, US Patent No. 5,786,845 in view of Fujii, Japanese Patent No. JP361035023A.

As to claim 14, Fujii discloses a timer for timing a period of time after starting transmitting the preset image signal, and the channel is converted from the first channel to the second channel after the period of time (Abstract – the screen is blanked until the reception of the next channel is made stable; Fig. 5 – S9 is the step of waiting 1 second

(or any given period of time) after the channel change operation to display the second channel).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Fujii and Tsuria. Tsuria states that "scrolling through channels takes a certain amount of time, typically of the order of 1 second". The rationale for the combination would have been to provide timer circuitry to accurately count this 1 second, which Tsuria implies but does not specifically state. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT HANCE whose telephone number is (571)270-5319. The examiner can normally be reached on M-F 8:00am - 5:00am EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on (571) 272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. H./
Examiner, Art Unit 4134

/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 4134